

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number
WO 2004/057023 A1

(51) International Patent Classification⁷: C12Q 1/68

(21) International Application Number: PCT/EP2003/014661

(22) International Filing Date: 19 December 2003 (19.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02028582.1 20 December 2002 (20.12.2002) EP
60/439,439 13 January 2003 (13.01.2003) US

(71) Applicant (for all designated States except US): EVOTEC OAI AG [DE/DE]; Schnackenburgallee 114, 22525 Hamburg (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HINNAH, Silke [DE/DE]; Wogenmannsburg 27, 22457 Hamburg (DE). LAMBRÜ, Dagmar [DE/DE]; Gerdehaus 5, 29328 Fassberg (DE). DRÖGE, Sonja [DE/DE]; Louis-Mendel-Str. 80, 25335 Elmshorn (DE). JÄGER, Stefan [DE/DE];

(74) Agents: MEYERS, Hans-Wilhelm et al.; P.O. Box 10 22 41, 50462 Cologne (DE).

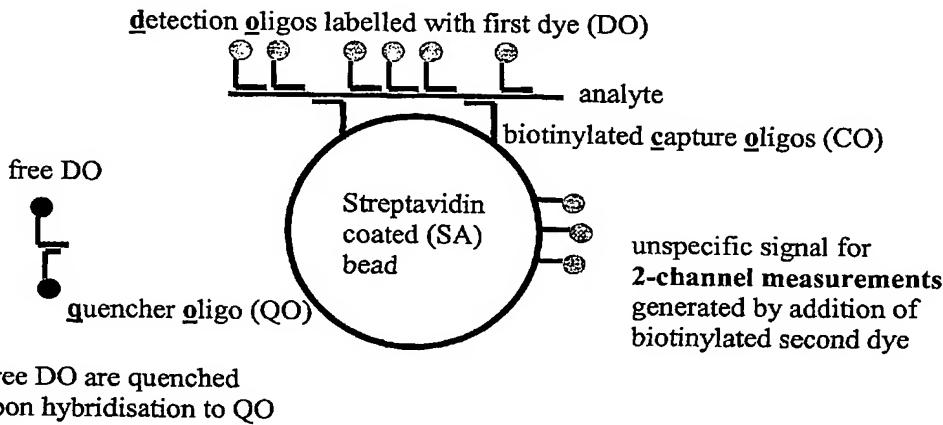
(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: A METHOD FOR DETECTING AN ANALYTE IN A SAMPLE



(57) Abstract: The present invention relates to a method for detecting an analyte in a sample comprising the steps of providing detection probes being labeled with a first reporter, which detection probes are capable of binding to the analyte, providing a solid support, providing capture probes being bound or capable of binding to the solid support, which capture probes are capable of binding to the analyte, thus concentrating the analyte on the solid support, contacting the sample with the detection probes, the solid support and the capture probes, and detecting the detection probes, wherein the detection of detection probes is conducted in the presence of quenching probes binding to surplus detection probes not being bound to the analyte and thereby quenching at least partially an emission of the first reporter of said surplus detection probes and/or the solid support is labeled with a second reporter different from the first reporter, imaging the sample at an emission wavelength of the second reporter, generating a mask obtained from imaging the sample at the emission wavelength of the second reporter and applying this mask to an image of the sample used for detecting the detection probes.



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.